

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-2. (Canceled)

3. (Currently amended) A method for producing a plant, comprising (1) transforming a plant cell using *Agrobacterium* with a desired polynucleotide, wherein the desired polynucleotide is flanked by at least one sequence of (a) 25 nucleotides in length that (b) promotes and facilitates integration of the desired polynucleotide into the plant genome and which (c) is not 100% identical to a T-DNA border, and wherein (d) the 25 nucleotide-long sequence comprises ~~[(+)]~~ a plant DNA sequence that comprises the consensus nucleotide sequence of SEQ ID NO:93 (ANGATNTATN₆GT) ~~that can be cleaved by an enzyme~~, where "N" is an A, G, C, or T nucleotide, ~~or (ii) a nucleotide sequence that comprises the consensus sequence of (i) but wherein 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, or more nucleotides of the nucleotide sequence are different from a T-DNA border sequence from an *Agrobacterium* species;~~ and (2) growing a plant from said transformed plant cell, which comprises in its genome the desired polynucleotide.

4. (Canceled)

5. (Previously presented) The method of claim 3, wherein the plant cell is a cell of a monocotyledon or dicotyledon plant.

6.-43. (Canceled)

44. (Previously presented) The method of claim 3, further comprising co-transforming the plant cell with a marker, wherein the desired polynucleotide and the marker are each in carrier DNAs, which are located in separate *Agrobacterium* vectors.

45. (Previously presented) The method of claim 44, wherein each vector is in a different *Agrobacterium* strain to the other vector.

46. (Previously presented) The method of claim 45, wherein the desired polynucleotide is located in a carrier DNA that is a P-DNA.
47. (Previously presented) The method of claim 44, wherein all of the vectors are in the same *Agrobacterium* strain.
48. (Previously presented) The method of claim 46, wherein the desired polynucleotide is operably linked to regulatory elements that are native to plants.
49. (Previously presented) The method of claim 44, wherein the vector that comprises the marker gene, further comprises a second marker gene.
50. (Previously presented) The method of claim 49, wherein the second marker gene encodes bacterial cytosine deaminase.
51. (Previously presented) The method of claim 3, wherein the marker gene is selected for 1 to 10 days.
52. (Previously presented) The method of claim 3, wherein the marker gene is a herbicide resistance gene or an antibiotic resistance gene.
53. (Previously presented) The method of claim 3, wherein the desired polynucleotide comprises sequences that, when expressed in a plant, facilitate the down-regulation of expression of at least one of R1, polyphenol oxidase, and phosphorylase.
54. (Previously presented) The method of claim 44, wherein either or both of (i) the vector that comprises the marker gene further comprises a backbone integration marker gene, and (ii) the vector that comprises the desired polynucleotide further comprises a backbone integration marker gene, wherein the backbone integration marker gene is not located in the transfer-DNA.
55. (Previously presented) The method of claim 54, wherein the integration marker gene is a gene encoding isopentyltransferase.
- 56.-58. (Canceled)
59. (Currently amended) A progeny plant obtained from the plant that is grown from the transformed plant cell of step (2) of claim 3, wherein the progeny plant comprises the

desired polynucleotide in its genome, wherein said desired polynucleotide consists essentially of (i) a nucleic acid sequence that is native to the selected plant, native to a plant from the same species as the selected plant, or native to a plant that is sexually interfertile with said selected plant, wherein (ii) the desired polynucleotide does not contain foreign DNA that is not from the selected plant species or a plant that is sexually compatible with the selected plant species.

60. (Previously presented) The method of claim 3, wherein the 25 nucleotide-long sequence is a recognition site for a virD2 enzyme.

61. (New) A method for producing a progeny plant with a desired polynucleotide in its genome, comprising (1) transforming a plant cell using Agrobacterium with a desired polynucleotide, wherein the desired polynucleotide is flanked by at least one sequence of (a) 25 nucleotides in length that (b) promotes and facilitates integration of the desired polynucleotide into the plant genome and which (c) is not 100% identical to a T-DNA border, and wherein (d) the 25 nucleotide-long sequence comprises a plant DNA sequence that comprises the consensus nucleotide sequence of SEQ ID NO:93 (ANGATNTATN₆GT), where "N" is an A, G, C, or T nucleotide; (2) growing a plant from said transformed plant cell, which comprises in its genome the desired polynucleotide; and (3) growing a progeny plant from a seed of the plant of step (2), wherein the genome of the progeny plant comprises the desired polynucleotide.

62. (New) The method of claim 61, wherein said desired polynucleotide consists essentially of (i) a nucleic acid sequence that is native to the selected plant, native to a plant from the same species as the selected plant, or native to a plant that is sexually interfertile with said selected plant, wherein (ii) the desired polynucleotide does not contain foreign DNA that is not from the selected plant species or a plant that is sexually compatible with the selected plant species.

63. (New) A method for producing a progeny plant with a desired polynucleotide in its genome, comprising (1) transforming a plant cell using Agrobacterium with a desired polynucleotide, wherein the desired polynucleotide is flanked by at least one sequence of (a) 25 nucleotides in length that (b) promotes and facilitates integration of the desired polynucleotide into the plant genome and which (c) is not 100% identical to a T-DNA border, and wherein (d) the 25 nucleotide-long sequence comprises a plant DNA sequence that comprises the consensus nucleotide sequence of SEQ ID NO: 49; and (2) growing a plant from said transformed plant cell, which comprises in its genome the desired polynucleotide.

64. (New) A progeny plant obtained from the plant that is grown from the transformed plant cell of step (2) of claim 63, wherein the progeny plant comprises the desired polynucleotide in its genome, wherein said desired polynucleotide consists essentially of (i) a nucleic acid sequence that is native to the selected plant, native to a plant from the same species as the selected plant, or native to a plant that is sexually interfertile with said selected plant, wherein (ii) the desired polynucleotide does not contain foreign DNA that is not from the selected plant species or a plant that is sexually compatible with the selected plant species.